

In the Claims

Canceled Claims

Please cancel claims 1-10 and 19 to 20 as being directed to subject matter in the parent application the claims of which have been allowed and the issue fee paid.

Amended Claims

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)

1 11. (currently amended) A method for producing soy pectin comprising the steps of:
2 extracting a soybean hull/hypocotyl mixture in a mineral acid at an elevated temperature and
3 for a time and at a pH sufficient to form a pectinaceous soy material from the mixture;
4 cooling the ~~extracted~~ pectinaceous soy material while raising the pH of the pectinaceous soy
5 material;
6 separating a soluble pectinaceous soy material from ~~a solid~~ an insoluble residue;
7 precipitating the soluble pectinaceous soy material in an alcohol to form a precipitated
8 pectinaceous soy material; and
9 drying the precipitated pectinaceous soy material to form a soy pectin.

1 12. (previously presented) The method of claim 11, further comprising the step of:
2 pre-washing the soybean hull/hypocotyl mixture in the presence of a solvent for a time and
3 temperature sufficient for a liquid fraction of the mixture to obtain a percent transmittance of above
4 about 35%.

1 13. (previously presented) The method of claim 12, further comprising the step of:
2 after pre-washing, soaking the soybean hull/hypocotyl mixture in the presence of a solvent
3 for a time, temperature and pH sufficient to expand the cellular matrix of the soybean hull/hypocotyl
4 mixture.

1 14.(previously presented) The method of claim 11, further comprising the step of:
2 post-washing the precipitated pectinaceous soy material with pressing in the presence of a
3 solvent a sufficient number of times to form a washed precipitated pectinaceous soy material.

1 15.(previously presented) The method of claim 14, wherein the post-washing step comprising:
2 washing the precipitated pectinaceous soy material at least three times with a 70% 2-propanol
3 aqueous solution with pressing after each washing to form a first washed precipitated pectinaceous
4 soy material; and
5 washing the first washed precipitated pectinaceous soy material at least two times with 100%
6 2-propanol with pressing after each washing to form the washed precipitated pectinaceous soy
7 material.

1 16.(previously presented) The method of claim 14, further comprising the step of:
2 prior to drying, slowly evaporating residual 2-propanol present in the washed precipitated
3 pectinaceous soy material for a time sufficient to enhance a whiteness of the soy pectin.

1 **17.(previously presented)** The method of claim 11, wherein the drying step comprises:
2 evaporating residual 2-propanol from the precipitated pectinaceous soy material for a time
3 sufficient to enhance a whiteness of the soy pectin; and
4 drying the precipitated soy pectinaceous material under a vacuum at an elevated evaporation
5 temperature.

1 **18.(previously presented)** The method of claim 11, further comprising the step of:
2 grinding the soy pectin.

19.(canceled)
20.(canceled)

1 21.(currently amended) A method for producing soy pectin comprising the steps of:
2 pre-washing a hull/hypocotyl mixture in the presence of a solvent for a time and at a
3 temperature sufficient to produce a pre-washed hull/hypocotyl mixture, where a liquid fraction
4 thereof has a percent transmittance above about 35%;

1 extracting the pre-washed hull/hypocotyl mixture in a mineral acid at an elevated temperature
2 for a time and at a pH sufficient to form a soy pectinaceous-containing mixture;
3 cooling the soy pectinaceous-containing mixture while raising the pH;
4 separating a soluble soy pectinaceous material from ~~a solid~~ an insoluble residue;
5 precipitating the soluble soy pectinaceous material in an alcohol to form a precipitated soy
6 pectinaceous material; and
7 drying the precipitated soy pectinaceous material to form soy pectin.

1 **22.(previously presented)** The method of claim 21, further comprising the step of:
2 soaking the pre-washed hull/hypocotyl mixture in the presence of a solvent for a time, at a
3 temperature, and at a pH sufficient to expand the cellular matrix of the pre-washed extraction
4 hull/hypocotyl mixture.

1 **23.(previously presented)** The method of claim 21, further comprising the step of:
2 post-washing the precipitated soy pectinaceous material in the presence of a solvent with
3 pressing after each post-washing a sufficient number of times to from a washed precipitated soy
4 pectanecous material.

1 **24.(previously presented)** The method of claim 23, wherein the post-washing step comprises:
2 washing the precipitated soy pectinaceous material at least three times with a 70% 2-propanol
3 aqueous solution with pressing after each washing to form a first washed precipitated soy
4 pectinaceous material; and
5 washing the first washed precipitated soy pectinaceous material at least two times with 100%
6 2-propanol with pressing after each washing to form the washed precipitated soy pectinaceous
7 material.

1 **25.(previously presented)** The method of claim 23, further comprising the step of:
2 prior to drying, slowly evaporating residual 2-propanol from the washed precipitated soy
3 pectinaceous material for a time sufficient to enhance a whiteness of the soy pectin.

1 **26.(previously presented)** The method of claim 21, wherein the drying step comprises:

1 slowly evaporating residual 2-propanol from the precipitated soy pectinaceous material for
2 a time sufficient to enhance a whiteness of the soy pectin; and

3 drying the precipitated soy pectinaceous material under a vacuum at an elevated evaporation
4 temperature.

1 **27.(previously presented)** The method of claim 21, further comprising the step of:
2 after drying, grinding the soy pectin.

1 **28.(currently amended)** A method for producing soy pectin comprising the steps of:
2 pre-washing the hull/hypocotyl mixture in the presence of a solvent for a time and
3 temperature sufficient to produce a pre-washed hull/hypocotyl mixture, where a liquid fraction
4 thereof has a percent transmittance above about 35%;

5 soaking the pre-washed hull/hypocotyl mixture in the presence of a solvent for a time, at a
6 temperature and at a pH sufficient to expand the cellular matrix of the pre-washed hull/hypocotyl
7 mixture;

8 extracting the pre-washed hull/hypocotyl mixture in a mineral acid at an elevated temperature
9 for a time and at a pH sufficient to form a soy pectinaceous-containing mixture;

10 cooling the soy pectinaceous-containing mixture while raising the pH;

11 separating a soluble soy pectinaceous material from ~~a solid an insoluble~~ residue;

12 precipitating the soluble soy pectinaceous material in an alcohol to form a precipitated soy
13 pectinaceous material; and

14 drying the precipitated soy pectinaceous material to form soy pectin.

1 **29.(previously presented)** The method of claim 28, further comprising the step of:
2 post-washing the precipitated soy pectinaceous material in the presence of a solvent with
3 pressing after each post-washing a sufficient number of times to from a washed precipitated soy
4 pectanecous material.

1 **30.(previously presented)** The method of claim 29, wherein the post-washing step comprises:

1 washing the precipitated soy pectinaceous material at least three times with a 70% 2-propanol
2 aqueous solution with pressing after each washing to form a first washed precipitated soy
3 pectinaceous material; and

4 washing the first washed precipitated soy pectinaceous material at least two times with 100%
5 2-propanol with pressing after each washing to form the washed precipitated soy pectinaceous
6 material.

1 **31.(previously presented)** The method of claim 29, further comprising the step of:
2 slowly evaporating residual 2-propanol from the washed precipitated soy pectinaceous
3 material for a time sufficient to enhance a whiteness of the soy pectin.

1 **32.(previously presented)** The method of claim 28, wherein the drying step comprises:
2 slowly evaporating residual 2-propanol from the precipitated soy pectinaceous material for
3 a time sufficient to enhance a whiteness of the soy pectin; and
4 drying the precipitated soy pectinaceous material under a vacuum at an elevated evaporation
5 temperature.

1 **33.(previously presented)** The method of claim 28, further comprising the step of:
2 after drying, grinding the soy pectin.